

WE CLAIM:

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1. A conference bridge, comprising:
a receiver capable of being coupled to a network,
said receiver to receive at least one media data packet from at
least two sources forming a media conference, each media data
packet defining a compressed media signal;
an energy detection and talker selection unit coupled
to said receiver to:
determine at least one speech parameter
corresponding to each of the compressed media
signals; and
select a set of the sources within the
media conference as talkers based on the determined
speech parameters.
2. A conference bridge according to claim 1, wherein the
media data packets are audio data packets and the compressed
media signals defined by the media data packets are compressed
audio signals.
3. A conference bridge according to claim 2, wherein the
speech parameter corresponding to each of the compressed media
signals is a number of bytes within each of the compressed
media signals.
4. A conference bridge according to claim 2, wherein the
speech parameter corresponding to each of the compressed media
signals is a pitch value within each of the compressed media
signals.

5. A conference bridge according to claim 2, wherein the speech parameter corresponding to each of the compressed media signals is an energy level corresponding to each of the compressed media signals.

6. A conference bridge according to claim 1, wherein the media data packets are audio/video data packets and the compressed media signals defined by the media data packets are compressed audio/video signals.

7. A conference bridge according to claim 1, wherein to select a set of the sources within the media conference as talkers, the energy detection and talker selection unit operates, for each of the received compressed media signals, to:

determine whether the compressed media signal contains speech based on the corresponding speech parameter;

if determined that the compressed media signal contains speech, determine whether the compressed media signal corresponds to a previously selected talker; and

if determined that the compressed media signal does not correspond to a previously selected talker, determine whether a maximum number of talkers parameter is met, discard the compressed media signal in the case that the maximum number of talkers parameter is met and select the source corresponding to the compressed media signal as a talker within the media conference in the case that the maximum number of talkers parameter is not met.

8. A conference bridge according to claim 1 further comprising an output unit coupled to the energy detection and talker selection unit, the output unit, for each of the
5 received compressed media signals, to:

determine whether the compressed media signal corresponds to a talker within the media conference; and

if determined that the compressed media signal corresponds to a talker, encapsulate the compressed media
10 signal and output the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

9. A conference bridge according to claim 1, wherein the
15 set of the sources within the media conference selected as talkers comprises one of first and second sources selected within the media conference as primary and secondary talkers respectively, one of the sources selected within the media conference as a lone talker, and none of the sources selected
20 within the media conference as a talker.

10. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received
25 compressed media signals, to:

determine whether the compressed media signal corresponds to the lone talker within the media conference; and

if determined that the compressed media signal corresponds to the lone talker, encapsulate the compressed

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media signal and output the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

- 5 11. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

10 determine whether the compressed media signal corresponds to one of the primary and secondary talkers within the media conference; and

15 if determined that the compressed media signal corresponds to one of the primary and secondary talkers, encapsulate the compressed media signal and output the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

- 20 12. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

25 determine whether the compressed media signal corresponds to the secondary talker within the media conference; and

if determined that the compressed media signal corresponds to the secondary talker, encapsulate the compressed media signal, output the encapsulated compressed media signal to the primary talker within the media conference, determine

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whether the compressed media signal has been generated for previously, save the compressed media signal if not previously generated for; and discard the compressed media signal if previously generated for.

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13. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

10 determine whether the compressed media signal corresponds to the secondary talker within the media conference; and

if determined that the compressed media signal corresponds to the secondary talker, encapsulate the compressed media signal, output the encapsulated compressed media signal to the primary talker within the media conference, determine whether the compressed media signal has been generated for previously; if not previously generated for, decompress the compressed media signal, resulting in a secondary media signal, and save the secondary media signal; and discard the compressed media signal if previously generated for.

14. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the primary talker within the media conference; and

if determined that the compressed media signal corresponds to the primary talker, encapsulate the compressed media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; decompress
5 the compressed media signal, resulting in a primary media signal; determine whether a corresponding secondary media signal is saved; if a corresponding secondary media signal is not saved, generate a secondary media signal; mix the primary and secondary media signals into a single combined media
10 signal; encapsulate the combined media signal; and output the encapsulated combined media signal to the sources within the media conference except the primary and secondary talkers.

15. A conference bridge according to claim 14, wherein
15 the output unit further operates to decompress the secondary media signal prior to mixing it with the primary media signal if the secondary media signal is saved only in compressed form.

16. A conference bridge according to claim 9 further
20 comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the primary talker within the media conference;
25 and

if determined that the compressed media signal corresponds to the primary talker, encapsulate the compressed media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; decompress

the compressed media signal, resulting in a primary media signal; determine whether a corresponding secondary media signal is saved; if a corresponding secondary media signal is not saved, monitor for receipt of a media data packet from the
5 secondary talker for a predetermined time period; if the predetermined time period expires and no media data packet corresponding to the secondary talker has been received, generate a secondary media signal; mix the primary and secondary media signals into a single combined media signal;
10 encapsulate the combined media signal; and output the encapsulated combined media signal to the sources within the media conference except the primary and secondary talkers.

17. A conference bridge according to claim 9 further
15 comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal
corresponds to the primary talker within the media conference;
20 and

if determined that the compressed media signal
corresponds to the primary talker, encapsulate the compressed
media signal; output the encapsulated compressed media signal
to the secondary talker within the media conference; determine
25 whether a corresponding compressed media signal associated with
the secondary talker is saved; if a corresponding compressed
media signal associated with the secondary talker is not saved,
generate a compressed media signal for the secondary talker;
encapsulate the compressed media signals corresponding to the

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primary and secondary talkers into a combined media data packet; and output the combined media data packet to the sources within the media conference except the primary and secondary talkers.

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18. A conference bridge according to claim 9 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

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determine whether the compressed media signal corresponds to the primary talker within the media conference; and

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if determined that the compressed media signal corresponds to the primary talker, encapsulate the compressed media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; determine whether a corresponding compressed media signal associated with the secondary talker is saved; if a corresponding compressed media signal associated with the secondary talker is not saved,

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monitor for receipt of a media data packet from the secondary talker for a predetermined time period; if the predetermined time period expires and no media data packet corresponding to the secondary talker has been received, generate a compressed media signal for the secondary talker; encapsulate the

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compressed media signals corresponding to the primary and secondary talkers into a combined media data packet; and output the combined media data packet to the sources within the media conference except the primary and secondary talkers.

19. A conference bridge according to claim 1, wherein the set of the sources within the media conference selected as talkers comprises one of first, second and third sources selected within the media conference as primary, secondary and tertiary talkers, first and second sources selected within the media conference as primary and secondary talkers respectively, one of the sources selected within the media conference as a lone talker, and none of the sources selected within the media conference as a talker.

20. A conference bridge according to claim 19 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the tertiary talker within the media conference; and

if determined that the compressed media signal corresponds to the tertiary talker, encapsulate the compressed media signal and output the encapsulated compressed media signal to the primary and secondary talkers within the media conference.

21. A conference bridge according to claim 19 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal
corresponds to the tertiary talker within the media conference;
and

if determined that the compressed media signal
5 corresponds to the tertiary talker, decompress the compressed
media signal, resulting in a tertiary media signal; save the
tertiary media signal; separately mix the tertiary media signal
with primary and secondary media signals to generate a first
mixed media signal and a second mixed media signal
0 respectively; encapsulate the first and second mixed media
signals; and output the first and second mixed media signals to
the secondary and primary talkers respectively within the media
conference.

22. A conference bridge, comprising conferencing control logic to:

receive at least one media data packet from at least two sources forming a media conference, each media data packet defining a compressed media signal;

determine at least one speech parameter corresponding to each of the compressed media signals; and

~~select a set of the sources within the media conference as talkers based on the determined speech parameters.~~

23. A method for selecting a set of talkers within a media conference, comprising:

receiving at least one media data packet from at least two sources forming a media conference, each media data packet defining a compressed media signal;

determining at least one speech parameter

5 corresponding to each of the compressed media signals; and

selecting a set of the sources within the media conference as talkers based on the determined speech parameters.

10 24. A method according to claim 23, wherein the media data packets are audio data packets and the compressed media signals defined by the media data packets are compressed audio signals.

15 25. A method according to claim 24, wherein the speech parameter corresponding to each of the compressed media signals is a number of bytes within each of the compressed media signals.

20 26. A method according to claim 24, wherein the speech parameter corresponding to each of the compressed media signals is a pitch value within each of the compressed media signals.

25 27. A method according to claim 24, wherein the speech parameter corresponding to each of the compressed media signals is an energy level corresponding to each of the compressed media signals.

28. A method according to claim 23, wherein the media data packets are audio/video data packets and the compressed media signals defined by the media data packets are compressed audio/video signals.

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29. A method according to claim 23, wherein said selecting a set of the sources within the media conference as talkers comprises, for each of the received compressed media signals:

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determining whether the compressed media signal contains speech based on the corresponding speech parameter;

determining whether the compressed media signal corresponds to a previously selected talker if determined that the compressed media signal contains speech;

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determining whether a maximum number of talkers parameter is met if determined that the compressed media signal does not correspond to a previously selected talker;

discarding the compressed media signal in the case that the maximum number of talkers parameter is met; and

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selecting the source corresponding to the compressed media signal as a talker within the media conference in the case that the maximum number of talkers parameter is not met.

30. A method according to claim 23 further comprising,

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for each of the received compressed media signals:

determining whether the compressed media signal corresponds to a talker within the media conference; and

if determined that the compressed media signal corresponds to a talker, encapsulating the compressed media

signal and outputting the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

5 31. A method according to claim 23, wherein the set of the sources within the media conference selected as talkers comprises one of first and second sources selected within the media conference as primary and secondary talkers respectively, one of the sources selected within the media
10 conference as a lone talker, and none of the sources selected within the media conference as a talker.

32. A method according to claim 31 further comprising, for each of the received compressed media signals:

15 determining whether the compressed media signal corresponds to the lone talker within the media conference; and
if determined that the compressed media signal corresponds to the lone talker, encapsulating the compressed media signal and outputting the encapsulated compressed media
20 signal to the sources within the media conference except the source corresponding to the compressed media signal.

33. A method according to claim 31 further comprising, for each of the received compressed media signals:

25 determining whether the compressed media signal corresponds to one of the primary and secondary talkers within the media conference; and

if determined that the compressed media signal corresponds to one of the primary and secondary talkers,

encapsulating the compressed media signal and outputting the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

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34. A method according to claim 31 further comprising, for each of the received compressed media signals:

determining whether the compressed media signal corresponds to the secondary talker within the media conference; and

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if determined that the compressed media signal corresponds to the secondary talker, encapsulating the compressed media signal, outputting the encapsulated compressed media signal to the primary talker within the media conference, determining whether the compressed media signal has been generated for previously, saving the compressed media signal if not previously generated for; and discarding the compressed media signal if previously generated for.

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20 35. A method according to claim 31 further comprising, for each of the received compressed media signals:

determining whether the compressed media signal corresponds to the secondary talker within the media conference; and

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if determined that the compressed media signal corresponds to the secondary talker, encapsulating the compressed media signal, outputting the encapsulated compressed media signal to the primary talker within the media conference, determining whether the compressed media signal has been

generated for previously; if not previously generated for,
decompressing the compressed media signal, resulting in a
secondary media signal, and saving the secondary media signal;
and, if previously generated for, discarding the compressed
5 media signal.

36. A method according to claim 31 further comprising,
for each of the received compressed media signals:

determining whether the compressed media signal
10 corresponds to the primary talker within the media conference;
and

if determined that the compressed media signal
corresponds to the primary talker, encapsulating the compressed
media signal; outputting the encapsulated compressed media
15 signal to the secondary talker within the media conference;
decompressing the compressed media signal, resulting in a
primary media signal; determining whether a corresponding
secondary media signal is saved; if a corresponding secondary
media signal is not saved, generating a secondary media signal;
20 mixing the primary and secondary media signals into a single
combined media signal; encapsulating the combined media signal;
and outputting the encapsulated combined media signal to the
sources within the media conference except the primary and
secondary talkers.

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37. A method according to claim 36 further comprising
decompressing the secondary media signal prior to mixing it
with the primary media signal if the secondary media signal is
saved only in compressed form.

38. A method according to claim 31 further comprising,
for each of the received compressed media signals:

determining whether the compressed media signal
corresponds to the primary talker within the media conference;
5 and

if determined that the compressed media signal
corresponds to the primary talker, encapsulating the compressed
media signal; outputting the encapsulated compressed media
signal to the secondary talker within the media conference;
10 decompress the compressed media signal, resulting in a primary
media signal; determining whether a corresponding secondary
media signal is saved; if a corresponding secondary media
signal is not saved, monitoring for receipt of a media data
packet from the secondary talker for a predetermined time
15 period; if the predetermined time period expires and no media
data packet corresponding to the secondary talker has been
received, generating a secondary media signal; mixing the
primary and secondary media signals into a single combined
media signal; encapsulating the combined media signal; and
20 outputting the encapsulated combined media signal to the
sources within the media conference except the primary and
secondary talkers.

39. A method according to claim 31 further comprising,
25 for each of the received compressed media signal:

determining whether the compressed media signal
corresponds to the primary talker within the media conference;
and

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media data packet corresponding to the secondary talker has been received, generating a compressed media signal for the secondary talker; encapsulating the compressed media signals corresponding to the primary and secondary talkers into a
5 combined media data packet; and outputting the combined media data packet to the sources within the media conference except the primary and secondary talkers.

41. A method according to claim 23, wherein the set of
10 the sources within the media conference selected as talkers comprises one of first, second and third sources selected within the media conference as primary, secondary and tertiary talkers, first and second sources selected within the media conference as primary and secondary talkers respectively, one
15 of the sources selected within the media conference as a lone talker, and none of the sources selected within the media conference as a talker.

42. A method according to claim 41 further comprising,
20 for each of the received compressed media signals:
determining whether the compressed media signal corresponds to the tertiary talker within the media conference;
and

if determined that the compressed media signal
25 corresponds to the tertiary talker, encapsulating the compressed media signal and outputting the encapsulated compressed media signal to the primary and secondary talkers within the media conference.

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43. A method according to claim 41 further comprising,
for each of the received compressed media signals:

determining whether the compressed media signal
corresponds to the tertiary talker within the media conference;
5 and

if determined that the compressed media signal
corresponds to the tertiary talker, decompressing the
compressed media signal, resulting in a tertiary media signal;
saving the tertiary media signal; separately mixing the
10 tertiary media signal with primary and secondary media signals
to generate a first mixed media signal and a second mixed media
signal respectively; encapsulating the first and second mixed
media signals; and outputting the first and second mixed media
signals to the secondary and primary talkers respectively
15 within the media conference.

44. A conference bridge, comprising:

means for receiving at least one media data packet
from at least two sources forming a media conference, each
20 media data packet defining a compressed media signal;

means for determining at least one speech parameter
corresponding to each of the compressed media signals; and

means for selecting a set of the sources within the
media conference as talkers based on the determined speech
25 parameters.

45. A conference bridge according to claim 44 further
comprising:

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means for generating media data packets corresponding to the compressed media signals received from at least one of the sources selects as a talker; and

means for outputting the generated media data
5 packets.

46. A conference bridge, comprising:
a receiver capable of being coupled to a network,
said receiver to receive at least one media data packet from at
10 least two sources forming a media conference, each media data
packet defining a compressed media signal;

an energy detection and talker selection unit coupled
to said receiver to process the received compressed media
signals including selecting a set of the sources within the
15 media conference as talkers, one of the talkers being a lead
talker; and

an output unit coupled to the energy detection and
talker selection unit to output media data packets that
correspond to compressed media signals received from the
20 talkers; and

wherein the media data packets corresponding to the
lead talker are always output from the conference bridge in the
same order as the media data packets which are received from
the lead talker.

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47. A conference bridge according to claim 46, wherein
the media data packets are audio data packets and the
compressed media signals within each of the media data packets
are compressed audio signals.

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wherein the receiver operates further to save the
5 time stamps corresponding to the media data packets received
from the lead talker and the output unit operates further to
insert the saved time stamps within the corresponding media
data packets output from the conference bridge.

50. A conference bridge according to claim 49, wherein the set of the sources within the media conference selected as talkers comprises one of first and second sources selected within the media conference as primary and secondary talkers respectively, one of the sources selected within the media conference as a lone talker, and none of the sources selected within the media conference as a talker.

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51. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the lone talker within the media conference; and

if determined that the compressed media signal corresponds to the lone talker, encapsulate the compressed media signal and output the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

52. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to one of the primary and secondary talkers within the media conference; and

if determined that the compressed media signal corresponds to one of the primary and secondary talkers, encapsulate the compressed media signal and output the encapsulated compressed media signal to the sources within the media conference except the source corresponding to the compressed media signal.

53. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the secondary talker within the media conference; and

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if determined that the compressed media signal corresponds to the secondary talker, encapsulate the compressed media signal, output the encapsulated compressed media signal to the primary talker within the media conference, determine
5 whether the compressed media signal has been generated for previously, save the compressed media signal if not previously generated for; and discard the compressed media signal if previously generated for.

10 54. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

15 determine whether the compressed media signal corresponds to the secondary talker within the media conference; and

20 if determined that the compressed media signal corresponds to the secondary talker, encapsulate the compressed media signal, output the encapsulated compressed media signal to the primary talker within the media conference, determine whether the compressed media signal has been generated for previously; if not previously generated for, decompress the compressed media signal, resulting in a secondary media signal, and save the secondary media signal; and discard the compressed
25 media signal if previously generated for.

55. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and

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if determined that the compressed media signal corresponds to the primary talker, encapsulate the compressed media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; decompress the compressed media signal, resulting in a primary media signal; determine whether a corresponding secondary media signal is saved; if a corresponding secondary media signal is not saved, monitor for receipt of a media data packet from the secondary talker for a predetermined time period; if the predetermined time period expires and no media data packet corresponding to the secondary talker has been received, generate a secondary media signal; mix the primary and secondary media signals into a single combined media signal; encapsulate the combined media signal; and output the encapsulated combined media signal to the sources within the media conference except the primary and secondary talkers.

58. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the primary talker within the media conference; and

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        if determined that the compressed media signal
corresponds to the primary talker, encapsulate the compressed

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media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; determine whether a corresponding compressed media signal associated with the secondary talker is saved; if a corresponding compressed media signal associated with the secondary talker is not saved, generate a compressed media signal for the secondary talker; encapsulate the compressed media signals corresponding to the primary and secondary talkers into a combined media data packet; and output the combined media data packet to the sources within the media conference except the primary and secondary talkers.

59. A conference bridge according to claim 50 further comprising an output unit coupled to the energy detection and talker selection unit that operates, for each of the received compressed media signals, to:

determine whether the compressed media signal corresponds to the primary talker within the media conference; and

if determined that the compressed media signal corresponds to the primary talker, encapsulate the compressed media signal; output the encapsulated compressed media signal to the secondary talker within the media conference; determine whether a corresponding compressed media signal associated with the secondary talker is saved; if a corresponding compressed media signal associated with the secondary talker is not saved, monitor for receipt of a media data packet from the secondary talker for a predetermined time period; if the predetermined time period expires and no media data packet corresponding to

wherein at least two of the plurality of packet-based terminals operates to output media data packets comprising compressed media signals, these packet-based terminals together forming a media conference;

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61. A network comprising a packet-based network, a conference bridge coupled to the packet-based network, a non-packet-based telephone network, at least one packet-based apparatus coupled between the packet-based network and the non-
5 packet-based telephone network, and a plurality of sources for media signals that are each coupled to the non-packet-based telephone network;

wherein the conference bridge comprises conferencing control logic to receive at least one media data packet from at
10 least two of the sources forming a media conference, each media data packet defining a compressed media signal; to process the received compressed media signals including selecting a set of the sources within the media conference as talkers; and to output media data packets that correspond to the compressed
15 media signals received from the talkers; and

wherein at least one of the packet-based apparatus operates to receive the media data packets output from the conference bridge and to process these received media data packets including performing a jitter buffering operation, the
20 jitter buffering operations being performed within the packet-based apparatus only.

62. A method of processing compressed media signals within a media conference, the method comprising:

25 receiving at least one compressed media packet from at least two sources forming the media conference, each media data packet defining a compressed media signal;

processing the received compressed media signals including selecting a set of the sources within the media conference as talkers;

outputting media data packets that correspond to
5 compressed media signals received from the talkers;

receiving the media data packets that correspond to compressed media signals received from the talkers at one or more packet-based apparatus; and

processing the received compressed media signals
10 including performing a first and only jitter buffering operation.

63. A method according to claim 62, wherein the one or more packet-based apparatus each comprise one of the sources
15 forming the media conference.

64. A method according to claim 62, wherein the processing the received compressed media signals further includes a decompression operation which outputs uncompressed
20 media signals corresponding to the received compressed media signals; and

wherein the method further comprises forwarding the uncompressed media signals to at least one of the sources forming the media conference.

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65. A conference bridge, comprising conferencing control logic to:

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receive at least one media data packet from at least two sources forming a media conference, each media data packet defining a compressed media signal;

process the received compressed media signals
5 including selecting a set of the sources within the media conference as talkers, one of the talkers being a lead talker; and

output media data packets that correspond to compressed media signals received from the talkers; and

10 wherein the media data packets corresponding to the lead talker are always output from the conference bridge in the same order as the media data packets which are received from the lead talker.

15 66. A conference bridge, comprising:

means for receiving at least one media data packet from at least two sources forming a media conference, each media data packet defining a compressed media signal;

20 means for processing the received compressed media signals including means for selecting a set of the sources within the media conference as talkers, one of the talkers being a lead talker; and

25 means for outputting media data packets that correspond to the lead talker always in the same order as the media data packets which are received from the lead talker.

67. A packet-based apparatus, comprising:

a receiver capable of being coupled to a network, said receiver to receive a media data packet from a conference

bridge, the media data packet defining two or more compressed media signals, and perform initial processing of the received media data packet comprising removing the packet overhead; and
an output unit coupled to the receiver to decompress
5 each of the compressed media signals in order to generate corresponding uncompressed media signals, mix the uncompressed media signals into a combined media signal, and output the combined media signal.

10 68. A packet-based apparatus according to claim 67, wherein the media data packet is an audio data packet and the compressed media signals within the media data packet are compressed audio signals.

15 69. A packet-based apparatus according to claim 67, wherein to perform initial processing of the received media data packet, the receiver further comprises buffering each of the compressed media signals for jitter after the removing of the packet overhead from the received media data packet.

20 70. A packet-based apparatus according to claim 67, wherein the output unit operates further to buffer each of the uncompressed media signals for jitter prior to the mixing of the signals.

25 71. A packet-based apparatus according to claim 67, wherein the receiver operates further to receive a second media data packet from the conference bridge, the second media data packet defining a single compressed media signal, and perform

initial processing of the received second media data packet comprising removing the packet overhead; and

wherein the output unit operates further to decompress the single compressed media signal in order to
5 generate a single uncompressed media signal and output the single uncompressed media signal.

72. A packet-based apparatus according to claim 67 further comprising a speaker coupled to the output unit to
10 receive the combined media signal and broadcast audio signals corresponding to the received combined media signal.

73. A packet-based network interface comprising a packet-based apparatus according to claim 67, wherein the combined
15 media signal is arranged to be output, via a non-packet-based network, to a non-packet-based telephone terminal.

74. A packet-based apparatus, comprising control logic to:
20 receive a media data packet from a conference bridge, the media data packet defining two or more compressed media signals;

perform initial processing of the received media data packet comprising removing the packet overhead;

25 decompress each of the compressed media signals in order to generate corresponding uncompressed media signals;

mix the uncompressed media signals into a combined media signal; and

output the combined media signal.

75. A packet-based apparatus, comprising:

means for receiving a media data packet from a
conference bridge, the media data packet defining two or more
5 compressed media signals;

means for performing initial processing of the
received media data packet comprising removing the packet
overhead;

10 means for decompressing each of the compressed media
signals in order to generate corresponding uncompressed media
signals;

means for mixing the uncompressed media signals into
a combined media signal; and

15 means for outputting the combined media signal.

76. A method of outputting a combined media signal
comprising:

20 receiving a media data packet from a conference
bridge, the media data packet defining two or more compressed
media signals;

performing initial processing of the received media
data packet comprising removing the packet overhead;

decompressing each of the compressed media signals in
order to generate corresponding uncompressed media signals;

25 mixing the uncompressed media signals into a combined
media signal; and

outputting the combined media signal.

77. A packet-based apparatus, comprising:

a receiver capable of being coupled to a network, said receiver to receive a media data packet from a conference bridge, the media data packet defining a compressed media signal, and perform initial processing of the received media data packet comprising removing the packet overhead; and

an output unit coupled to the receiver to decompress the compressed media signal in order to generate a first uncompressed media signal, identify at least one other uncompressed media signal that corresponds to the first uncompressed media signal, mix the first uncompressed media signal with the other uncompressed media signal into a combined media signal, and output the combined media signal.

78. A packet-based apparatus according to claim 77, wherein the media data packet is an audio data packet and the compressed media signal within the media data packet is a compressed audio signal.

79. A packet-based apparatus according to claim 77, wherein to perform initial processing of the received media data packet, the receiver further comprises buffering the compressed media signal for jitter after the removing of the packet overhead from the received media data packet.

80. A packet-based apparatus according to claim 77, wherein the output unit operates further to buffer the uncompressed media signal for jitter prior to the mixing of the signals.

81. A packet-based apparatus according to claim 77,
wherein the receiver operates further to receive a second media
data packet from the conference bridge, the second media data
packet defining a second compressed media signal, and perform
5 initial processing of the received second media data packet
comprising removing the packet overhead; and

wherein the output unit operates further to
decompress the second compressed media signal in order to
generate a second uncompressed media signal and output the
10 second uncompressed media signal.

82. A packet-based apparatus according to claim 77,
wherein to identify at least one other uncompressed media
signal that corresponds to the first uncompressed media signal,
15 the output unit operates further to determine a first
identification item within the packet overhead of the received
media data packet and locate at least one other uncompressed
media signal that corresponds to a received media data packet
comprising a second identification item that relates to the
20 first identification item.

83. A packet-based terminal according to claim 82,
wherein the first and second identification items comprise time
stamps.

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84. A packet-based apparatus according to claim 77
further comprising a speaker coupled to the output unit to
receive the combined media signal and broadcast audio signals
corresponding to the received combined media signal.

86. A packet-based apparatus, comprising control logic
to:

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        perform initial processing of the received media data
packet comprising removing the packet overhead;

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identify at least one other uncompressed media signal
that corresponds to the first uncompressed media signal;

mix the first uncompressed media signal with the other uncompressed media signal into a combined media signal; and

output the combined media signal.

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87. A packet-based apparatus, comprising:

means for receiving a media data packet from a conference bridge, the media data packet defining a compressed media signal;

25 means for performing initial processing of the
received media data packet comprising removing the packet
overhead;

means for decompressing the compressed media signal
in order to generate a first uncompressed media signal;

means for identifying at least one other uncompressed media signal that corresponds to the first uncompressed media signal;

means for mixing the first uncompressed media signal
5 with the other uncompressed media signal into a combined media signal; and

means for outputting the combined media signal.

88. A method of outputting a combined media signal
10 comprising:

receiving a media data packet from a conference bridge, the media data packet defining a compressed media signal;

performing initial processing of the received media
15 data packet comprising removing the packet overhead;

decompressing the compressed media signal in order to generate a first uncompressed media signal;

identifying at least one other uncompressed media signal that corresponds to the first uncompressed media signal;

20 means for mixing the first uncompressed media signal with the other uncompressed media signal into a combined media signal; and

outputting the combined media signal.

25 89. A conference bridge, comprising:

a receiver capable of being coupled to a network to receive at least one first media data packet from at least one source within a media conference, each first media data packet defining a first compressed media signal, and receive at least

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5 an energy detection and talker selection unit coupled
to the receiver to select a set of the sources within the media
conference as talkers based upon the compressed media signals
within both the first and second media data packets.

10 90. A conference bridge according to claim 89, wherein
the first and second media data packets are audio data packets
and the compressed media signals within the first and second
media data packets are compressed audio signals.

15 91. A conference bridge according to claim 89, wherein
each of the second media data packets comprises a single
compressed media signal, the compressed media signal
corresponding to one of a lone talker, a primary talker and a
secondary talker selected by the other conference bridge in
20 which the particular media data packet was received from.

92. A conference bridge according to claim 89, wherein each of the second media data packets comprises at least two compressed media signals, the compressed media signals corresponding to at least a primary talker and a secondary talker selected by the other conference bridge in which the particular media data packet was received from.

93. A conference bridge according to claim 89 further comprising an output unit coupled to the energy detection and talker selection unit to encapsulate compressed media signals corresponding to the selected talkers and output these
5 encapsulated compressed media signals to the source that the conference bridge receives the first media data packet unless the particular source is selected as a talker.

94. A conference bridge according to claim 89 further
10 comprising an output unit coupled to the energy detection and talker selection unit to encapsulate compressed media signals corresponding to the selected talkers and output these encapsulated compressed media signals to the at least one other conference bridge.

15 95. A conference bridge according to claim 89 further comprising an output unit coupled to the energy detection and talker selection unit to encapsulate compressed media signals corresponding to the selected talkers and output these
20 encapsulated compressed media signals to the at least one other conference bridge unless the particular compressed media signals were received from the at least one other conference bridge prior to receiving the signals from another source.

25 96. A conference bridge according to claim 89, wherein to select a set of the sources within the media conference as talkers, the energy detection and talker selection unit operates to determine at least one speech parameter corresponding to each of the first and second compressed media

signals and select a set of the sources within the media conference as talkers based on the determined speech parameters.

5 97. A conference bridge, comprising:

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a receiver capable of being coupled to a network to receive at least one media data packet from at least one other conference bridge, each media data packet defining at least one compressed media signal corresponding to a particular source within a media conference; and

10 an energy detection and talker selection unit coupled to the receiver to select a set of the sources within the media conference as talkers based upon the compressed media signals within both the media data packets.

15 98. A conference bridge, comprising conferencing control logic to:

receive at least one first media data packet from at least one source within a media conference, each first media data packet defining a first compressed media signal;

20 receive at least one second media data packet from at least one other conference bridge, each second media data packet defining at least one second compressed media signal corresponding to a particular source within the media

25 conference; and

select a set of the sources within the media conference as talkers based upon the compressed media signals within both the first and second media data packets.

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99. A method for selecting a set of talkers within a media conference, comprising:

receiving at least one first media data packet from at least one source within a media conference, each first media data packet defining a first compressed media signal;

receiving at least one second media data packet from at least one other conference bridge, each second media data packet defining at least one second compressed media signal corresponding to a particular source within the media conference; and

selecting a set of the sources within the media conference as talkers based upon the compressed media signals within both the first and second media data packets.

100. A packet-based apparatus, comprising:

a receiver capable of being coupled to a network to receive at least one first media data packet from a first source within a media conference, each first media data packet defining a first compressed media signal; receive at least one second media data packet from a second source within the media conference, each second media data packet defining at least one second compressed media signal; and perform initial processing of the received first and second media data packet comprising removing the packet overhead; and

an output unit coupled to the receiver to decompress each of the first and second compressed media signals in order to generate corresponding first and second uncompressed media

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